THE MANY FACETS OF
THE MASLOV INDEX

American Institute of Mathematics

April 7-11, 2014

Monday, the 7th

Morning lectures
Étienne Ghys, *Appearances of the Maslov index in topology and geometry*
Emmanuel Giroux, *The Maslov index and Bott periodicity*

Afternoon discussion sessions
Linear symplectic algebra
Nonlinear Maslov index I

Tuesday, the 8th

Morning lectures
Leonid Polterovich, *The Maslov index in symplectic topology*
Denis Auroux, *Monotone Lagrangian tori*

Afternoon discussion sessions
Signatures of fibred 4-manifolds
Nonlinear Maslov index II
Wednesday, the 9\textsuperscript{th}

Morning lectures

Claude Viterbo, \textit{The Maslov index, positivity and Fourier transforms}

Afternoon discussion sessions

Definitions of the Maslov index
Boundary of the Siegel domain

Thursday, the 10\textsuperscript{th}

Morning lectures

Michelle Bucher, \textit{Bounded cohomology and the Maslov index}
Sylvain Cappell, \textit{Casson’s invariant and its generalisations}

Afternoon discussion sessions

On bounded cohomology
On the Casson invariant

Friday, the 11\textsuperscript{th}

Morning lectures

Jean Lannes, \textit{Symplectic linear algebra and the transversality defect}
Andrew Ranicki, \textit{Some numerical functions associated to the Maslov index}

Moderated problem session

Moderator: Claude Viterbo